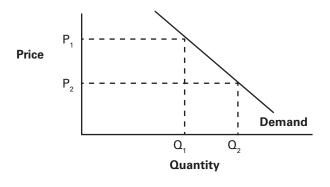
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The concept of demand is critically important to successful business development. Growth industries occur in sectors of the economy where demand is growing. For example, the health care industry will grow as the baby boomers reach retirement age. The demand for cars in China will increase as incomes rise. Anticipating changes in demand provides business opportunities

Demand is a price and quantity relationship. It tells the quantity of a product that will be demanded at various price levels. So demand is not one quantity demanded but a series of quantities demanded based on alternative prices. When plotted, this series of demand price/quantity relationships comprises a demand schedule. A hypothetical demand schedule is shown in Figure 1. Price is on the vertical axis and quantity demanded is on the horizontal axis. As one would expect, the demand schedule is an inverse relationship between price and quantity. The higher the price, the smaller the amount of product demanded. Likewise, the lower the price, the larger the amount of product demanded.

Figure 1. Demand schedule



As you might expect, demand is a slippery concept and difficult to put numbers on. However, even a basic understanding of demand proves valuable when analyzing a business opportunity.

What Demand is Not

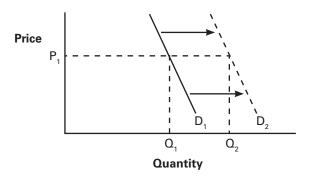
There are a variety of quantitative measures that are often considered to be indicators of demand, but are not. For example, consumption or per capita consumption appears to be an indicator of demand. However, these concepts are essentially indicators of supply. For example, because beef is generally a non-storable product, all of the beef produced during the year needs to be consumed in the year (after adjusting for some minor inventory adjustments at the beginning and end of the year). So the consumption of beef is based on the production of beef. There is no indicator of the price at which consumption takes place. A schedule of consumption levels and the corresponding price levels needed to clear the market is demand.

Determinants of Demand

A change in demand is not a movement up or down the demand curve. This is simply a movement along the demand curve. A change in demand is when the entire demand curve moves to the right or to the left. A change in demand creates a new schedule of price and quantity relationships. A shift to the right indicates an increase in demand as shown in Figure 2. An example of a determinant of demand that causes an increase in the demand schedule is population growth (more people buying the product). An increase in demand means that more of a product is demanded at a given price.

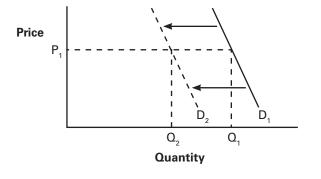
Revised March 2019

Figure 2. Increase in demand



A shift to the left indicates a decrease in demand as shown in Figure 3. An example of a determinant of demand that causes a decrease in the demand schedule is the emergence of a substitute product. A decrease in demand means that less of a product is demanded at a given price.

Figure 3. Decrease in demand



A change in demand for a product can be caused by many factors. Below are a few of the most common.

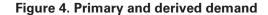
- **1. Population changes** An increase in population increases the demand for food and other products, shifting the curve to the right.
- **2. Demographic changes –** The aging population in the U.S. will affect the demand of many products. For example, the demand for health care will increase, shifting the curve to the right.

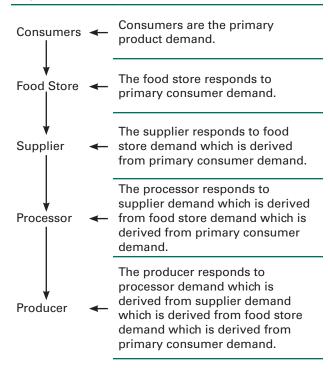
- **3. Tastes and preferences** In recent years, health concerns have had a major effect on the preference for various types of food products.
- **4. Rising incomes** Increasing income levels in developing countries increases the demand for food, shifting the demand curve to the right.
- 5. Income distribution The rising income disparity in the U.S. has increased the demand for high value/expensive products by high income consumers while having little effect on the product demands of middle income consumers.
- **6. Substitute products** Because pork, beef, and poultry are all meat products, what happens in one industry affects the others. A disease problem in the poultry industry that reduces the supply of poultry will shift the demand curves for beef and pork to the right.

Derived Demand

Primary demand, derived demand, and the relationship between the two are important concepts in agricultural markets. Primary demand is the demand by the final user (consumer) for the product. For example, the primary demand for pork is the consumer who buys the product and consumes it. All other pork demands within the pork supply chain are derived from this primary demand.

For example, the food store's demand for pork from the supplier depends on how much pork the store can sell to the consumer. The supplier's demand for pork from the pork processor depends on the supplier's demand for pork from the food store. The pork processor's demand for pork from the pork producer is based on the supplier's demand for pork. So, all of these demands are derived from the primary consumer demand as shown in Figure 4.





Derived demand only exists because there is a primary demand from the consumer. If the primary demand ceases to exist, the derived demand also ceases to exist. Likewise, if there is a shift in primary demand there will also be a shift in derived demand.

Effective Demand

The term effective demand is used to differentiate between individuals and groups who have the will and the means to buy a product and those who have the will but not the means to buy the product. For example, the willingness of low income individuals to purchase an expensive car may be very strong, but they do not have the means to purchase the car. Effective demand only includes those individuals who have the will and the means to purchase a product.

The term effective demand is often used in reference to the demand for food from people in developing countries. Although the demand for food may be high, they do not possess the means to purchase the food. So, malnutrition and starvation often occur, not because of a shortage of food in the world, but a shortage of the means to purchase the food.

See the **Ag Decision Maker website** for more economic and business analysis concepts, www.extension.iastate.edu/agdm/vdanalysis. html#concepts.

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By Don Hofstrand retired extension value-added agriculture specialist

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